

What is claimed is:

Sub A 2 1. A connection system for connecting at least one light gauge steel panel to a support structure comprising:

applying an adhesive to at least one of said panel or support structure, said adhesive being curable at room temperature and able to adhere to steel;

placing said panel against said support structure;

driving at least one fastener through the panel into said support structure; and

allowing said adhesive to cure,

so that said panel is joined to said structure in a connection which is superior in load bearing capacity to a connection provided by the fastener alone.

2. The connection system of Claim 1 wherein the fastener is selected from the group consisting of self-drilling screws, rivets, pins, and clinches.

3. The connection system of Claim 1 wherein each said fastener is a self-drilling screw.

4. The connection system of Claim 1 wherein said adhesive is a two-part epoxy system.

5. The connection system of Claim 4 wherein said epoxy system comprises a resin and hardener which are mixed in substantially equal portions by weight.

6. The epoxy system of Claim 4 wherein said epoxy system comprises a resin and hardener which are mixed in substantially equal portions by volume.

7. The connection system of Claim 1 wherein said adhesive fully cures within approximately 72 hours.

Sub A 3 8. A connection system for connecting at least one light gauge steel member to a second member comprising:

applying bead of epoxy to at least one of said members, said epoxy being curable at room temperature and able to adhere to steel;

positioning said members in adjacent relationship with said epoxy disposed between said members;

driving at least one fastener through one member into said other member; and

allowing said epoxy to cure,
so that said members are joined in a connection which is superior in load bearing capacity to a connection provided by the fastener alone.

9. The connection system of Claim 8 wherein the fastener is selected from the group consisting of self-drilling screws, rivets, pins, and clinches.

10. The connection system of Claim 8 wherein each said fastener is a self-drilling screw.

11. The connection system of Claim 8 wherein said epoxy comprises a resin and hardener which are mixed in substantially equal portions by weight.

12. The epoxy system of Claim 8 wherein said epoxy comprises a resin and hardener which are mixed in substantially equal portions by volume.

13. The connection system of Claim 8 wherein said adhesive fully cures within approximately 72 hours.

14. The connection system of Claim 8 wherein a bead of epoxy is applied to both members.

15. The connection system of Claim 1 wherein said adhesive is composed of a material selected from the group consisting of epoxy, methacrylate and urethane.

16. A connection system for connecting at least one light gauge steel panel to a steel frame comprising:

applying bead of adhesive to at least one of said panel or frame, said adhesive being curable at room temperature and able to adhere to steel;

positioning said panel against said frame with said adhesive disposed between said panel and frame

driving at least one fastener through said panel into said frame and;

allowing said adhesive to cure,

so that said panel is joined to said frame in a connection which is superior in load bearing capacity to a connection provided by the fastener alone.

17. The connection system of Claim 16 wherein the fastener selected from the group consisting of self-drilling screws, rivets, pins, and clinches.

18. The connection system of Claim 16 wherein the adhesive is selected from the group consisting of epoxy, methacrylate, and urethane.

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